

The PowerPact Advantage

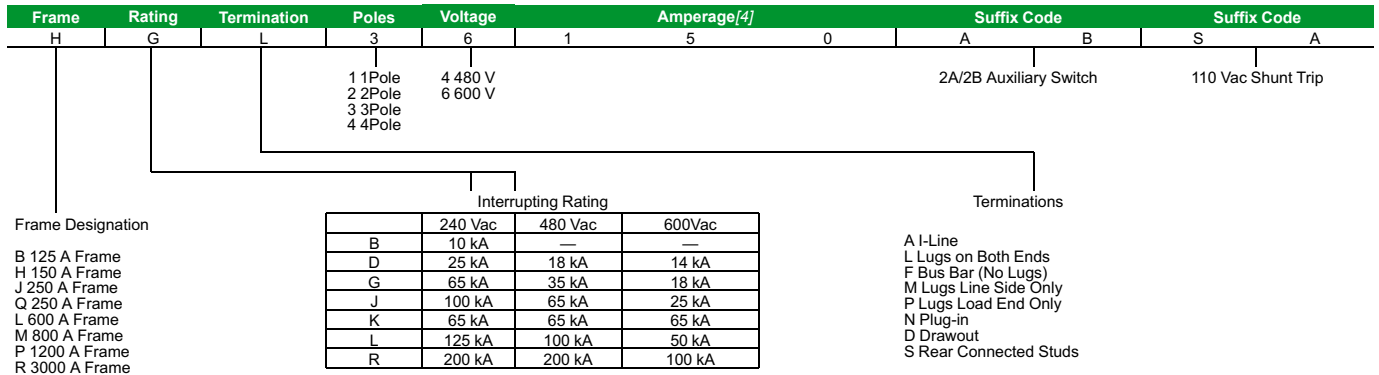
- **Proven Performance:** Industry-leading circuit breaker innovation and protection for heavy-duty commercial and industrial applications.
- **Smart:** Integrated metering options provide a cost-effective solution to reduce energy consumption, optimize energy costs, and improve energy availability for your facilities.
- **Flexible:** Full range of thermal-magnetic and electronic trip molded case circuit breakers from 15 A to 3000 A, delivering the ratings, configurations, and operators for your unique applications.
- **Simple:** Common catalog numbers, standardized ratings, and a full range of field-installable accessories make product selection, installation and maintenance easier than ever.
- **Common Design Features:** Mounting holes, door trim, and handle accessories



Table 7.47: PowerPact Interrupting Ratings

Voltage	Interrupting Rating						
	B	D	G	J	K	L	R
240 Vac	10 kA	25 kA	65 kA	100 kA	65 kA [1]	125 kA	200 kA
480 Vac		18 kA	35 kA	65 kA	65 kA [2]	100 kA	200 kA
600 Vac		14 kA	18 kA	25 kA	65 kA [2]	50 kA [3]	100 kA

Table 7.48: Common Catalog Numbering System



Description

- B-Frame Circuit Breakers, page 7-30
- H- and J-Frame Circuit Breakers, page 7-31
- Q-Frame Circuit Breakers, page 7-35
- L-Frame Circuit Breakers, page 7-36
- P-Frame Circuit Breakers, page 7-38
- R-Frame Circuit Breakers, page 7-39
- PowerPact™ H- and J-Frame Electronic Motor Circuit Protectors, page 7-41
- Motor Circuit Protectors and Motor Protector Circuit Breakers, page 7-44
- Automatic Switches, page 7-48
- 500 Vdc Circuit Breakers, page 7-49
- Mission Critical Circuit Breakers, page 7-57
- PowerPact™ Circuit Breaker Accessories, page 7-59
- Motor Operators and Rotary Handles, page 7-60
- Locks, Installation Accessories, and Rear Connections, page 7-62
- Mechanical Lugs, page 7-62
- Compression Lugs and Power Distribution Connectors (PDC), page 7-65
- Terminal Nuts, Terminal Pads, Terminal Shields and Accessories, page 7-67
- Plug-In and Drawout Mountings, page 7-68
- Micrologic™ Electronic Trip Units, page 7-69
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[1] B-Frame K interrupting rating is 100 kA at 240 Vac
 [2] P-frame K interrupting is 50 kA at 480 and 600 Vac.
 [3] P-frame L interrupting is 25 kA at 600 Vac.
 [4] For amperage of M-, P- or R-frame circuit breakers, add a zero to the three amperage digits; for example, 120 = 1200 A.

PowerPact Circuit Breaker Enclosures

The enclosures for the family of PowerPact circuit breakers H- through Q-frame are cULus listed unless otherwise noted. The enclosures are suitable for service entrance equipment when neutral assembly is installed. The short circuit current rating of the enclosed circuit breakers is equal to the rating of the circuit breaker installed unless otherwise noted. All enclosures will accept 100% rated circuit breakers unless otherwise noted.

PowerPact H- and J-Frame Circuit Breaker Enclosures

The enclosures' maximum short circuit ratings are 25 kAIR at 600 Vac, 65 kAIR at 480 Vac, 125 kAIR at 240 Vac and 20 kA at 250 Vdc unless otherwise noted. Enclosures accept 100% rated circuit breakers [5]. The enclosures are not compatible with earth-leakage or ground-fault modules.

Table 7.180: PowerPact H- and J-Frame Circuit Breaker Enclosures

Circuit Breaker			Enclosure Cat. No.			Neutral Assembly Kit	Service Ground Kit
Cat. No. Prefix	Rating	Poles	NEMA 1 Flush	NEMA 1 Surface	NEMA 3R	Cat. No.	Cat. No.
HDL	15–100 A	3	—	HD100S [6][7][8]	—	SN100FA	PKOGTA2
HDL, JDL	125–225 A 125–250	3	—	JD250S [9][7][8]	—	SN225KA SN400LA	PKOGTA2
HDL, HGL	15–100 A	2	H150F	H150S	H150R [10]	SN100FA SN400LA	PKOGTH150
HJL, HLL	15–100 A	2	J250F	J250S [11]	J250R [10][12]	SN100FA	PKOGTH150
HDL, HGL, HJL, HLL	15–100 A	3				SN400LA [13]	
JDL, JGL, JLL, JLL	125–150 A	3				PKOGTJ250	
	150–250 A	2, 3					
			NEMA 4, 4X, 5 [14] Type 304 Stainless Steel [15]	NEMA 4, 4x, 5 [14] Type 316 Stainless Steel [15]	NEMA 12/3R Without Knockouts [15]		
HDL, HGL, HJL, HLL	15–100 A	2, 3	J250DS [16]	J250SS [16]	J250AWK [16]	SN100FA	PKOGTH150
	125–150 A	2, 3				SN400LA [13]	
JDL, JGL, JLL, JLL	150–250 A	2, 3				PKOGTJ250	

PowerPact L-Frame Circuit Breaker and Molded Case Switch Enclosures

All enclosures accept 80% rated circuit breakers. The enclosures will also accept 100% rated circuit breakers to 400 amps. The enclosures have a blank top end wall and require field-cut openings. For details and hub catalog numbers see page 3–10.

Table 7.181: PowerPact L-Frame Circuit Breaker Enclosures

Circuit Breaker			Cat. No.			
Cat. No. Prefix	Rating	Poles	NEMA 12/3R Enclosures Without Knockouts	Neutral Assembly Kit	Copper Only Neutral Assembly Kit	Service Ground Kit
LDL, LGL, LJL, LLL, LRL	250–400 A 400–600 A	3	L600AWK [17][15][16]	SN400LA SN1000MA	SNC400LX SNC800LX	PKOGTA4
LGL, LLL, LRL	250–400 A 400–600 A	3	L600AWKMC [18][15]	SN400LA SN1000MA	SNC400LX SNC800LX	PKOGTA4

PowerPact Q-Frame Circuit Breaker Enclosures

The enclosures for the PowerPact Q Frame Circuit Breaker are UL listed. The short circuit ratings of these enclosed circuit breakers are equal to the interrupter ratings, at the supply voltage marked on the circuit breaker installed, unless otherwise noted.

Table 7.182: PowerPact Q-Frame Circuit Breaker Enclosures

Circuit Breaker			Enclosure Cat. No.			Neutral Assembly Kit	Service Ground Kit
Cat. No. Prefix	Rating	Poles	NEMA 1 Flush	NEMA 1Surface	NEMA 3R	Cat. No.	Cat. No.
QBL, QDL, QGL, QJL [19]	70–225 A	2 2, 3	— Q23225NF	Q22200NS [20] Q23225NS	Q22200NRB [20] Q23225NRB	—	PKOGTA2

[5] Use only 90°C (minimum) rated wire sized per ampacity of 75°C rated conductors for 100% rated circuit breakers.

[6] Rated for 240 Vac maximum. Short circuit current rating is 25 kAIR at 240 Vac.

[7] Accepts standard 80% rated circuit breakers only. Not rated for 100% rated circuit breakers.

[8] Use copper conductors only.

[9] Rated 480 Vac maximum. Short circuit current rating is 18 kAIR at 480 V.

[10] For conduit entry through the top end wall use one of the following Square D conduit hubs: A200L for 2.00 in., A250L for 2.50 in., A300L for 3.00 in., A350L for 3.50 in. or A400L for 4.00 in.

[11] Add suffix BE if no knockouts are required on the end walls.

[12] For access to the circuit breaker's standard, ammeter or energy trip unit panel/LCD, add suffix T.

[13] For 200% neutral use copper wire only.

[14] Complete rating is NEMA 3, 3R, 4, 4X, 5, and 12.

[15] For NEMA 3R applications, remove drain screw from bottom endwall.

[16] Add suffix VW for visibility to the standard, ammeter or energy trip unit of the PowerPact circuit breaker.

[17] Will accept PowerPact L-frame circuit breakers and Motor Protectors with suffixes M38X

[18] Will accept PowerPact L-frame Molded Case Switches.

[19] When the QJL circuit breaker is installed in the enclosure, the enclosure is limited to Short Circuit Current ratings of 65 kAIR at 240 V and 100 kAIR at 208 V.

[20] Limited to 200 A.